

FIG. 1

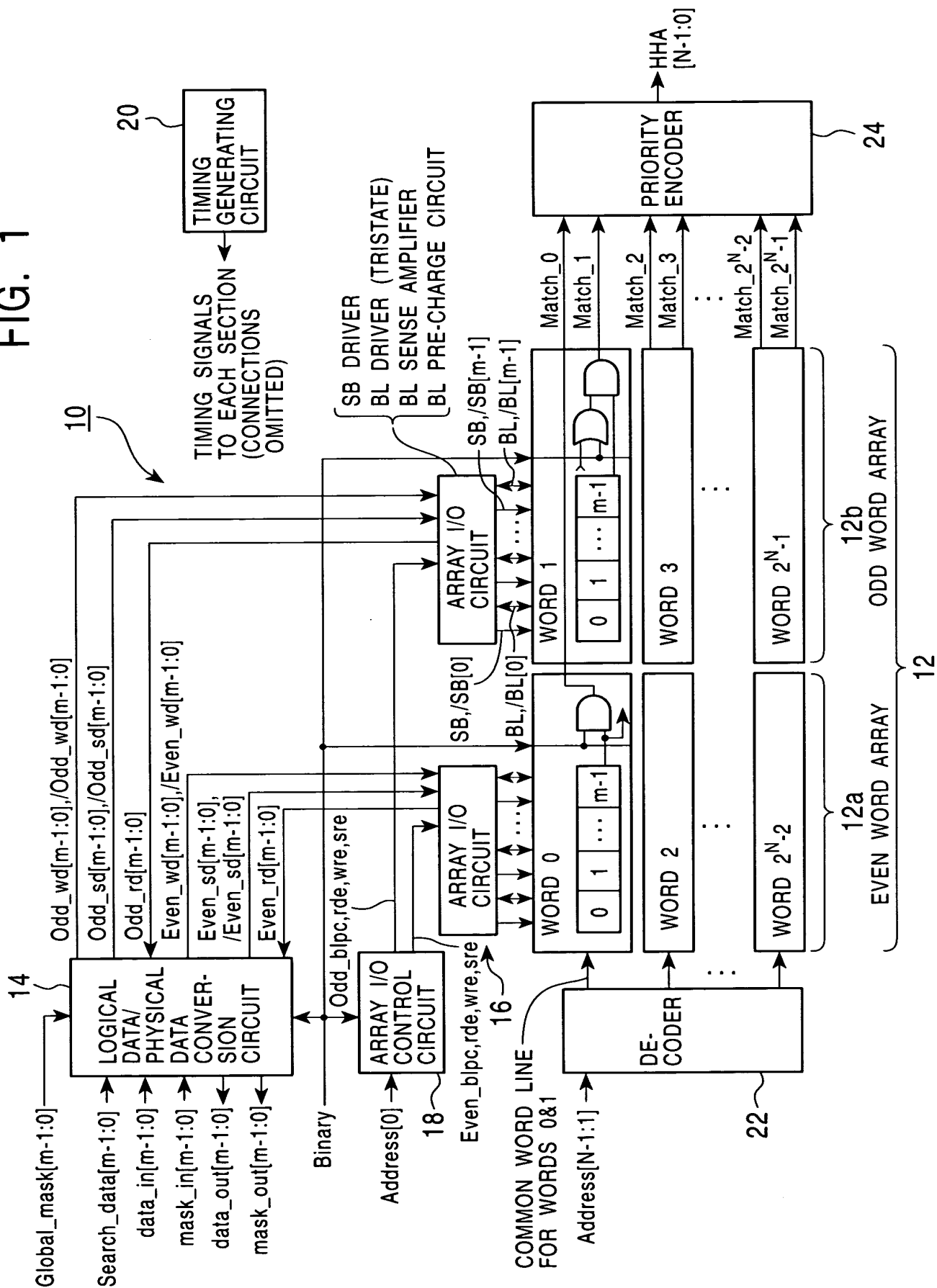


FIG. 2

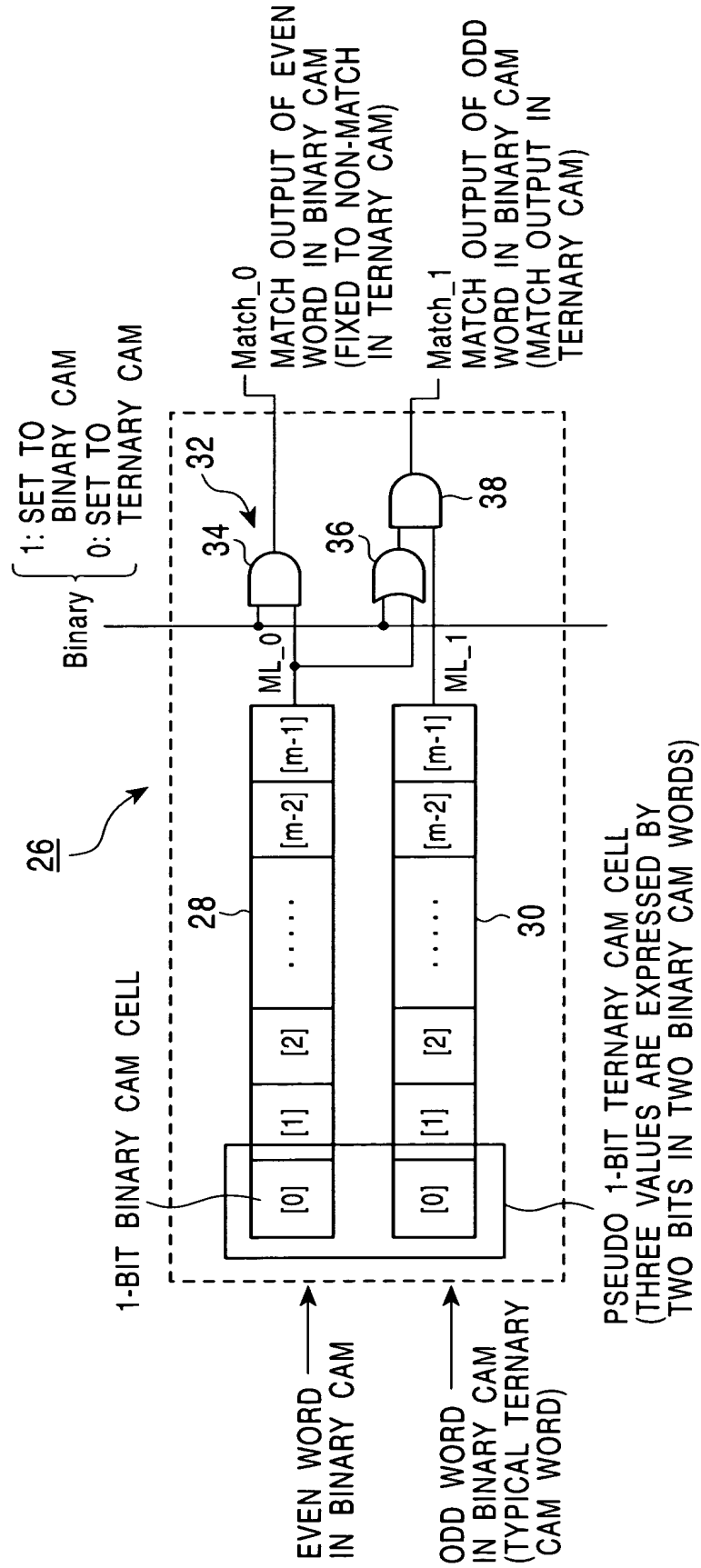


FIG. 3

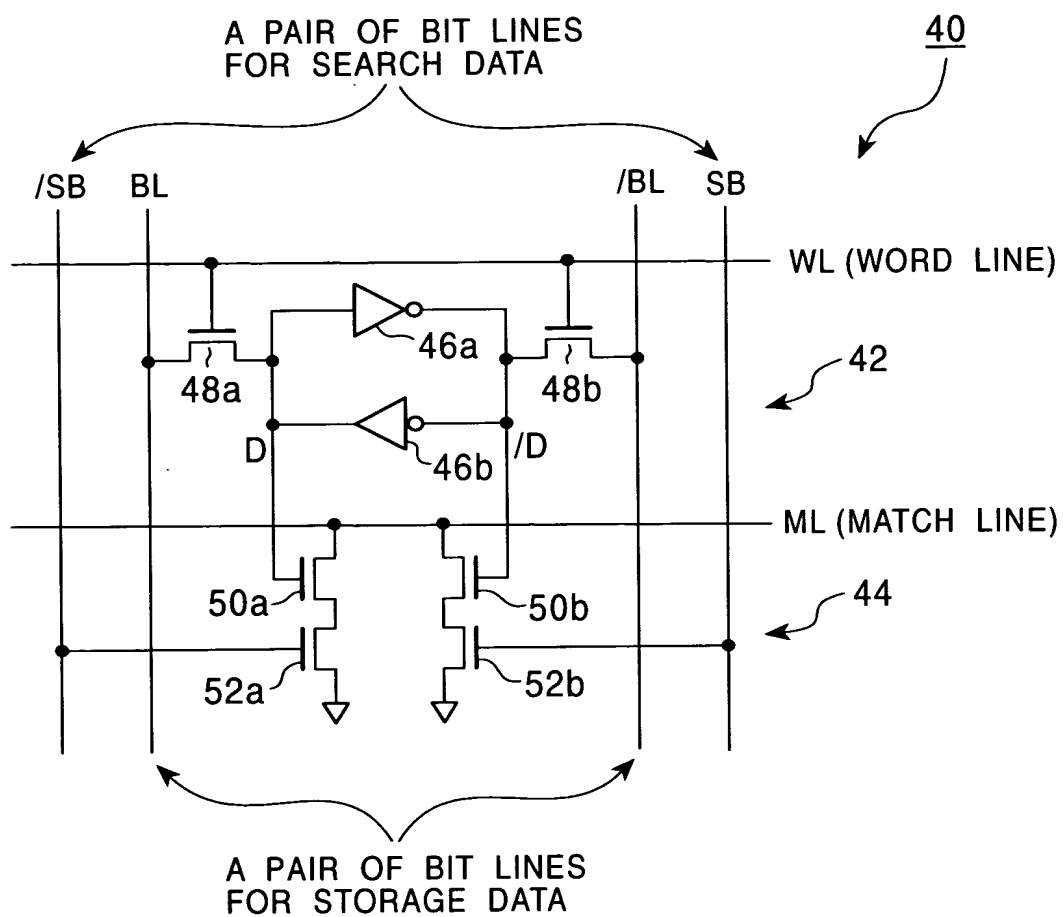


FIG. 4A

LOGICAL DATA	PHYSICAL DATA	SEARCH DATA	SEARCH BIT LINE OUTPUTS (SB,/SB)
0	0	0	0 DRIVEN (0,1)
1	1	1	1 DRIVEN (1,0)
		DON'T CARE	DON'T CARE (0,0)

FIG. 4B

EXTERNAL DATA	LOGICAL DATA (CONVENTIONAL TERNARY CAM DATA)		PHYSICAL DATA (INTERNAL DATA OF PRESENT INVENTION)		SEARCH DATA	SEARCH BIT LINE OUTPUTS (SB,/SB)	
	STORAGE DATA	MASK DATA	EVEN CELL	ODD CELL		EVEN	ODD
0	0	0	0	0	0	DON'T CARE (0,0)	0 DRIVEN (0,1)
1	1	0	1	1	1	1 DRIVEN (1,0)	DON'T CARE (0,0)
DON'T CARE X (UNDEFINED)		1	1	0	DON'T CARE	DON'T CARE (0,0)	DON'T CARE (0,0)

FIG. 5A

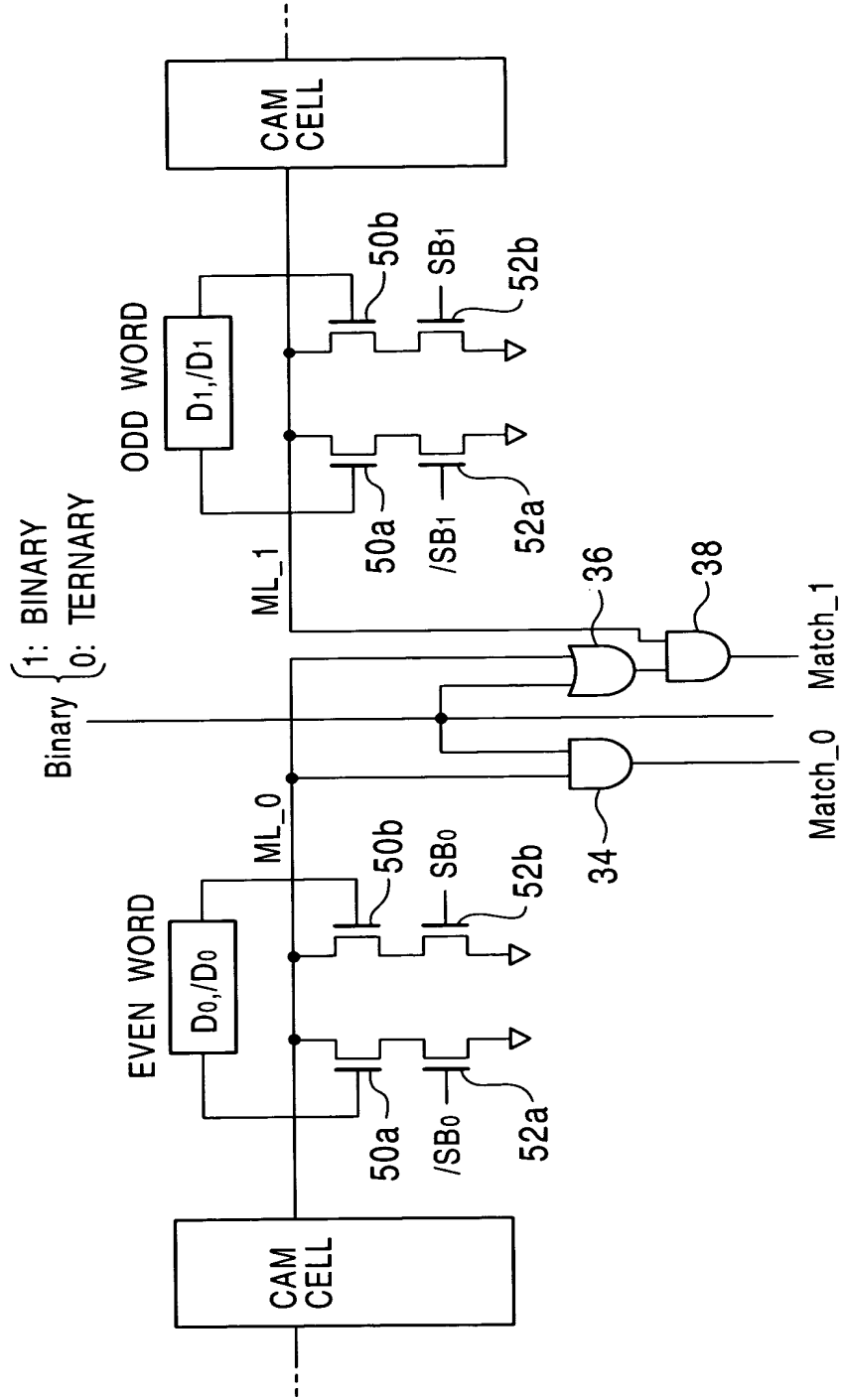


FIG. 5B

STORAGE DATA		SEARCH DATA			ML_0	ML_1	Match_0	Match_1
DATA	EVEN (D <sub>0</sub> )	ODD (D <sub>1</sub> )	DATA	EVEN (SB <sub>0</sub> /SB <sub>0</sub> )	ODD (SB <sub>1</sub> /SB <sub>1</sub> )			
0	0	0	0	(0,0)	(0,1)	1	0	1
			1	(1,0)	(0,0)	0		0
			X	(0,0)	(0,0)	1		1
1	1	1	0	(0,0)	(0,1)	1	0	0
			1	(1,0)	(0,0)	1		1
			X	(0,0)	(0,0)	1		1
X	1	0	0	(0,0)	(0,1)	1	0	1
			1	(1,0)	(0,0)	1		1
			X	(0,0)	(0,0)	1		1

X: DON'T CARE

FIG. 6

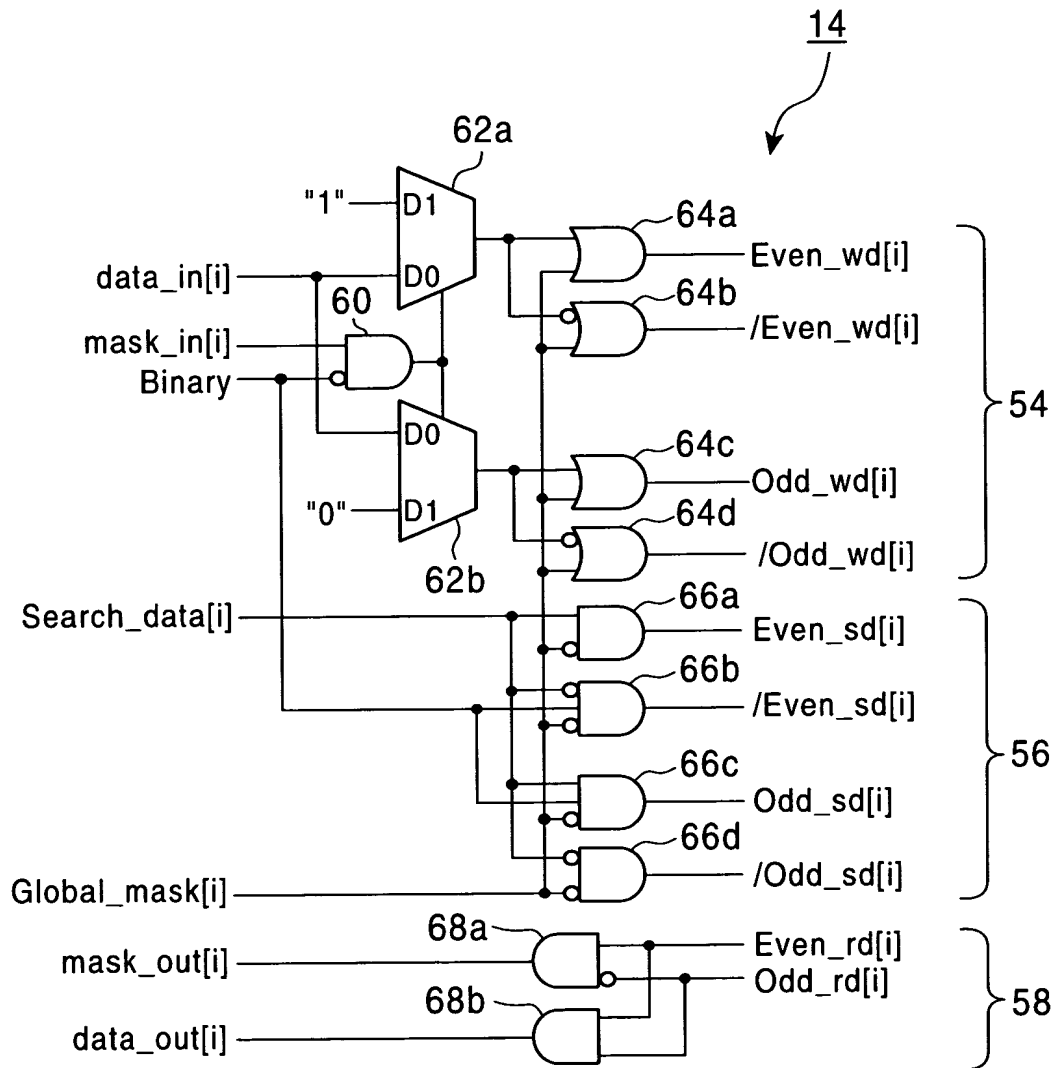


FIG. 7

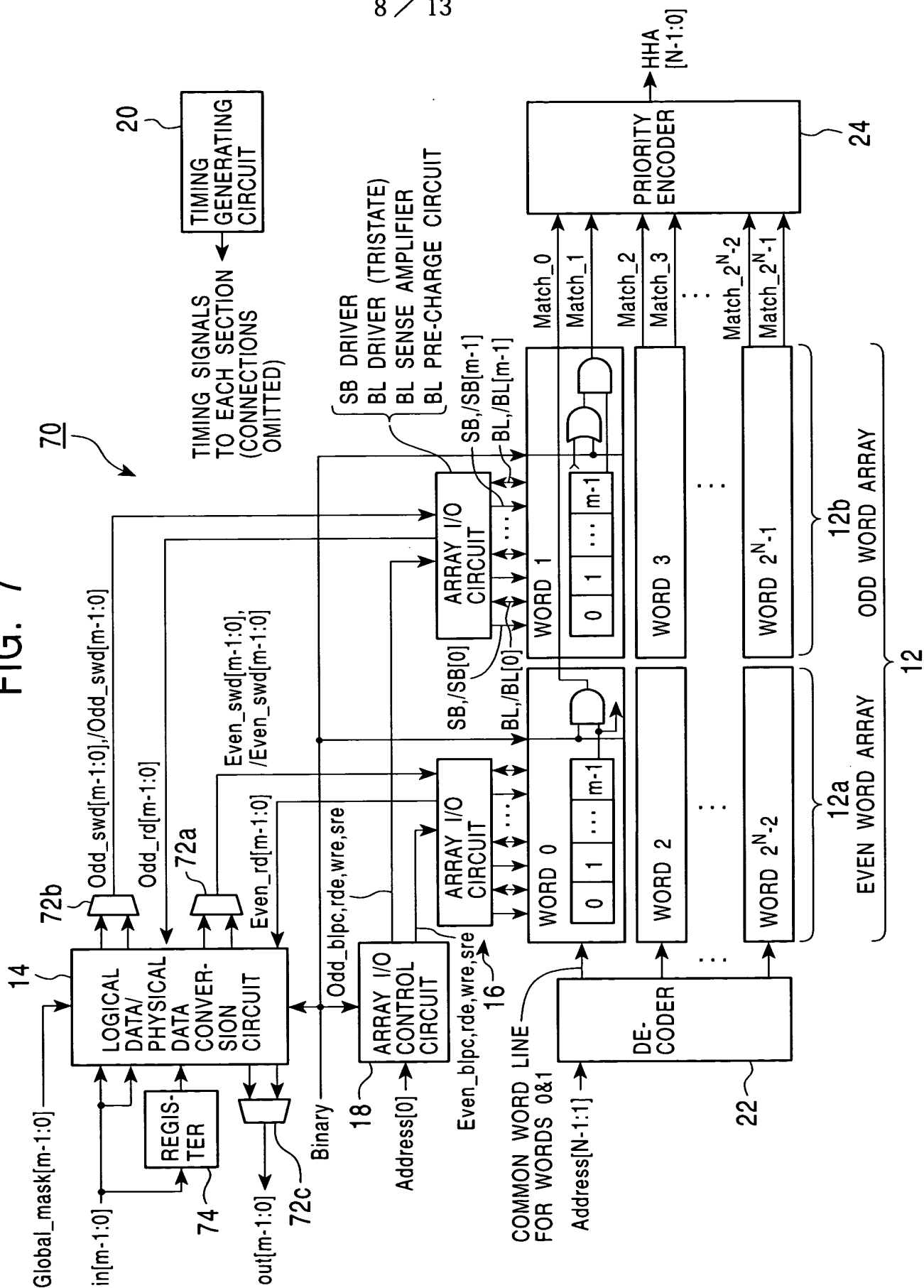




FIG. 8

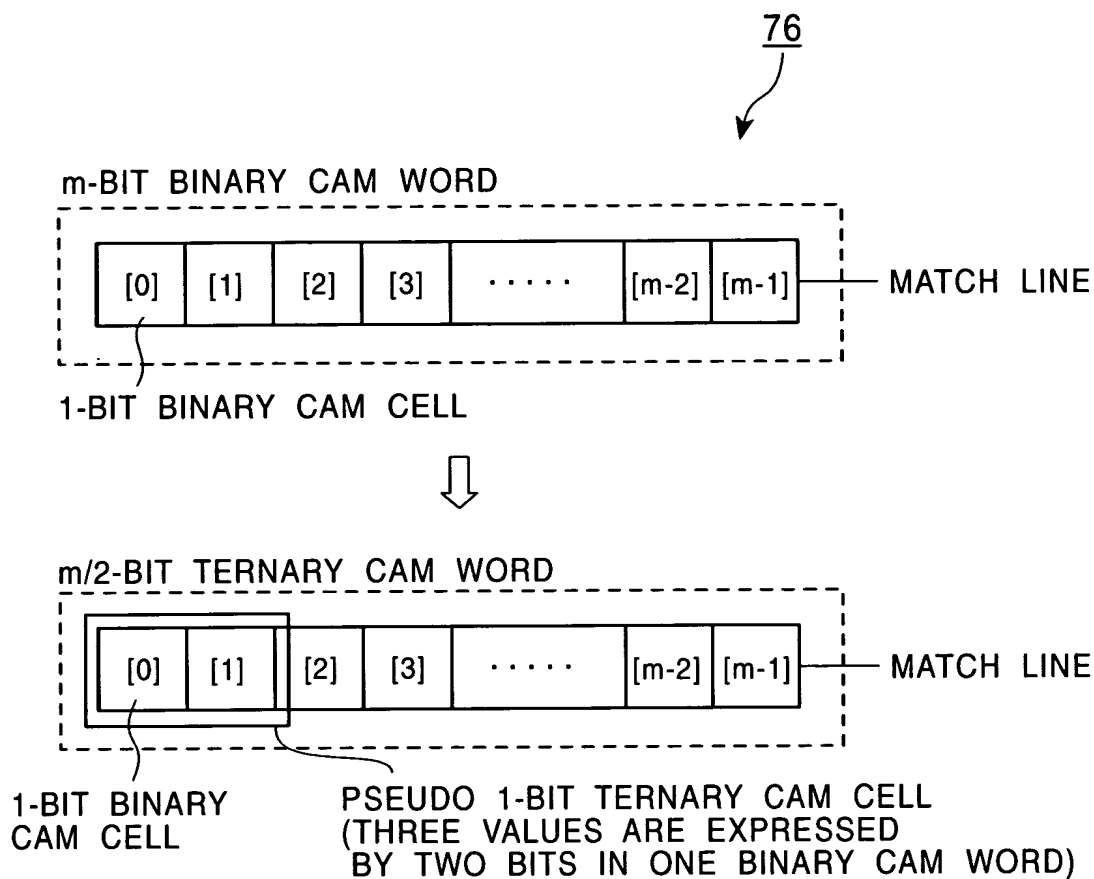


FIG. 9

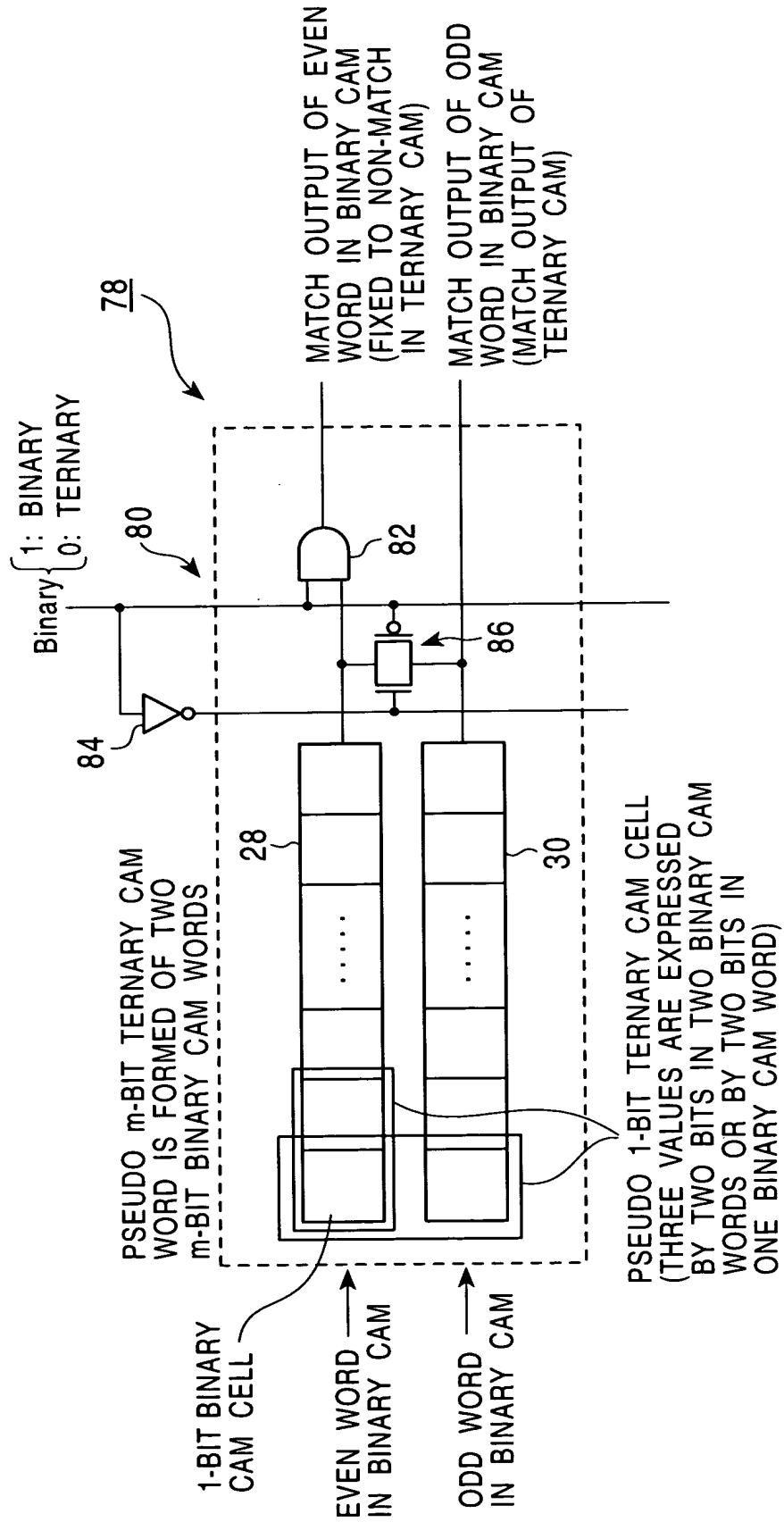


FIG. 10  
PRIOR ART

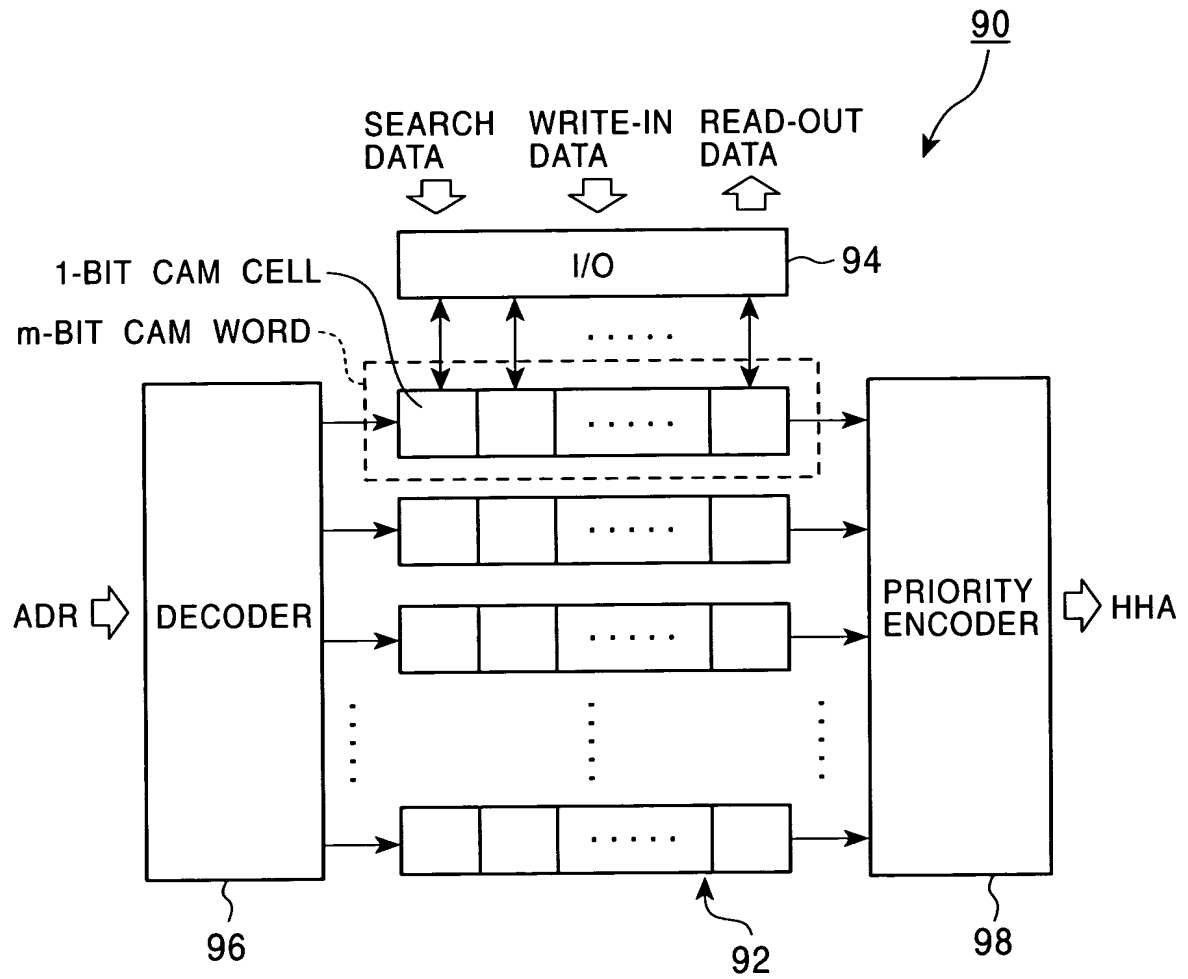




FIG. 12  
PRIOR ART

